

Title (en)  
AUTOMATED FIBER-PLACEMENT SYSTEMS AND METHODS

Title (de)  
AUTOMATISCHE FASERPLATZIERUNGSSYSTEME UND -VERFAHREN

Title (fr)  
SYSTÈMES ET PROCÉDÉS AUTOMATISÉS DE PLACEMENT DE FIBRES

Publication  
**EP 3715098 A1 20200930 (EN)**

Application  
**EP 20165003 A 20200323**

Priority  
US 201916363691 A 20190325

Abstract (en)  
An automated fiber-placement method comprises delivering a first quantity of pulsed energy to first discrete portions of at least one fiber-reinforced tape strip (104), and delivering a second quantity of pulsed energy to second discrete portions of at least the one fiber-reinforced tape strip (104), alternating with the first discrete portions. The first quantity of pulsed energy heats the first discrete portions to a first temperature. The second quantity of pulsed energy heats the second discrete portions to a second temperature. The automated fiber-placement method further comprises laying down at least the one fiber-reinforced tape strip (104) against a substrate along a virtual curvilinear path (128), such that (i) at least the one fiber-reinforced tape strip (104) is centered on the virtual curvilinear path (128), and (ii) the first discrete portions are transformed into discrete tape-regions (148), geometrically different from the first discrete portions (150).

IPC 8 full level  
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Citation (search report)

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AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
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**EP 20165003 A 20200323**; AU 2020200009 A 20200102; BR 102020005297 A 20200317; CA 3068714 A 20200117; CN 202010086486 A 20200211; EP 23213297 A 20200323; JP 2019236859 A 20191226; KR 20200008992 A 20200123; RU 2019143366 A 20191224; US 201916363691 A 20190325